

Abstract

A vehicle occupant safety system (10) for helping to protect an occupant (12) of a vehicle seat (14) during a crash condition comprises at least one sensor (174) for sensing a vehicle crash condition and generating a signal indicative of the crash condition. The vehicle occupant safety system (10) also includes seat belt webbing (20) for extending around the vehicle occupant (12) and a pretensioner (24). The pretensioner (24) is responsive to the signal generated by the sensor (174) for acting on the seat belt webbing (20) to pull an occupant (12) of the vehicle seat (14) who is forward in the seat (14) backward toward a back portion (18) of the seat (14). The pretensioner (24) comprises a seat belt retractor (26) that includes a spool (34) on which the seat belt webbing (20) is wound and an electric motor (108) for rotating the spool (34) in a belt retraction direction (172).

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